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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,607	12/31/2003	Wolfgang Roesner	AUS920020367US1	8559

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EXAMINER
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THANGAVELU, KANDASAMY

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/749,607	<b>Applicant(s)</b> ROESNER ET AL.	
	<b>Examiner</b> Kandasamy Thangavelu	<b>Art Unit</b> 2123	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-18 of the application have been examined.

#### ***Drawings***

2. The drawings submitted on December 31, 2003 are accepted.

#### ***Specification***

3. The disclosure is objected to because of the following informalities:

Page 23, Para 0078, Line 8, "automatically make the connect" appears to be incorrect and it appears that it should be "automatically make the connection".

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by **Roesner et al.** (U.S. Patent Application 2002/0128809).

5.1 **Roesner et al.** teaches randomized simulation model instrumentation. Specifically, as per claim 7, **Roesner et al.** teaches a data processing system (Fig. 1), comprising:

a processing resources (Fig. 2, Item 24);

data storage coupled to the processing resources, the data storage including a compiler for compiling a simulation model of a digital design (Fig. 2, Item 44; Fig. 3C, Items 342, 348 and 340), wherein the compiler includes (Fig. 3D, Item 462):

means for receiving an indication of a desired set of instrumentation entities to be included within a simulation model of a digital design (Fig. 4D, Items 460 and 461; Fig. 4D, Item 480; Page 7, Para 0076, L1-8 and L12-14), described by a plurality of hierarchically arranged design entities (Fig. 4D, Items 340 and 345; Page 1, Para 0010; Page 4, Para 0056, L6-7), wherein the instrumentation entities monitor logical operation of one or more of the plurality of design entities during simulation for occurrence of events of interest (Page 2, Para 0015; Page 7, Para 0076, L1-8; Page 7, Para 0077, L8-20);

means, responsive to the indication, for determining by reference to a bill-of-materials of a previously compiled file (Page 5, Para 0067; Page 6, Para 0073, L6-18) whether or not the previously compiled file was compiled with instrumentation entities compatible with the desired set of instrumentation entities (Page 9, Para 0105, L7-19); and

means, responsive to determining that the previously compiled file was compiled with compatible instrumentation entities, for compiling the simulation model of the digital design utilizing the previously compiled file in accordance with the indication (Page 9, Para 0105, L7-19).

Per Claim 8: **Roesner et al.** teaches that each of the plurality of design entities is defined by one or more hardware definition language (HDL) files (Fig. 4D, Item 340; Page 5, Para 0064, L1-2 and L5-6), and wherein each of the instrumentation entities is associated with one or more of the plurality of design entities by a statement within the one or more HDL files defining the one or more associated design entities (Page 7, Para 0076, L12-14; Page 8, Para 0085).

Per Claim 9: **Roesner et al.** teaches that the means for determining includes means for examining a constraint information data structure within the bill-of-materials (Page 16, Para 0166 and Para 0168).

Per Claim 10: **Roesner et al.** teaches that the previously compiled file is a first previously compiled file, and wherein the means for determining comprises means for determining whether or not the first previously compiled file was compiled with instrumentation entities compatible with the desired set of instrumentation entities (Page 9, Para 0105, L7-19), in response to a determination that a second previously compiled file corresponding to a parent design entity of a current entity corresponding to the first previously compiled file was not compiled with

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instrumentation entities compatible with the desired set (Page 4, Para 0058, L5-10; Page 9, Para 0105, L7-19; Page 10, Para 0115).

Per Claim 11: **Roesner et al.** teaches means, responsive to determining that the previously compiled file was not compiled with a compatible set of instrumentation entities, for compiling a portion of the simulation model corresponding to previously compiled file from one or more source code files (Page 9, Para 0105, L7-19; Page 10, Para 0109 and Para 0110).

Per Claim 12: **Roesner et al.** teaches that the means for determining comprises means for determining utilizing a recursive process (Page 5, Para 0062, L8-11; Page 6, Para 0071, L1-11), that traverses a logical tree formed by the plurality of hierarchically arranged design entities (Page 1 Para 0010; Page 4, Para 0056, L6-7).

5.2 As per Claims 1-6 and 13-18, these are rejected based on the same reasoning as Claims 7-12, supra. Claims 1-6 and 13-18 are method and program product claims reciting the same limitations as Claims 7-12, as taught throughout by **Roesner et al.**

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is

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571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



K. Thangavelu  
Art Unit 2123  
September 21, 2006